Amendments to the Claims

Please amend the claims in accordance with the following complete list:

1. (Canceled)

2. (Currently amended) A process for digesting materials comprising:

providing a reaction container having a medium disposed therein;

receiving a stream of materials to be treated into the reaction container, the stream of materials including organic waste material and microbes capable of digesting at least a portion of the organic material;

holding the materials in the reaction container for a time interval sufficient to allow the microbes to digest at least a portion of the organic material in a bacterial growth phase;

draining liquid from the reaction container to allow at least a portion of the microbes and undigested organic material to dry within the reaction container; and

receiving an additional stream of materials to be treated into the reaction chamber with said at least a portion of the microbes and undigested organic material, the additional stream of materials including additional organic waste material and microbes, wherein the additional stream of materials wets the at least a portion of the microbes and undigested organic material.

3. (Previously presented) The process for digesting materials of claim 2, wherein the stream of materials to be treated comprises substantially organic agricultural waste.

4. (Previously presented) The process for digesting materials of claim 2, wherein the digestion of organic material by the microbes produces methane and the process further comprises selectively removing methane from the reaction container.

5. (Canceled)

6. (Canceled)

7. (Previously presented) A process for digesting materials according to claim 2 further comprising:

after draining liquid from the reaction container, maintaining dry conditions within the reaction container for a predetermined time interval.

8. (Previously presented) A process for digesting materials according to claim 2 further comprising:
repeating the actions of holding the materials in the reaction container, draining liquid from the reaction container, and receiving an additional stream of materials to be treated into the reaction chamber.

9. (Currently amended) A method of processing waste materials in a treatment system comprising a plurality of reactor tanks, the method comprising:
filling each of the plurality of tanks with waste material from a waste material source, the waste material comprising organic material and microbes capable of digesting at least a portion of the organic material;
holding the waste material in the tanks for a time interval sufficient to allow the microbes to digest at least a portion of the organic material in a bacterial growth phase; and
draining liquid from a first one of the plurality of tanks to allow at least a portion of the microbes and undigested organic material to dry within the first one of the plurality of tanks.

10. (Previously presented) A method according to claim 9 further comprising:
refilling the first one of the plurality of tanks with waste material from the waste material source.

11. (Previously presented) A method according to claim 9 further comprising:
transferring waste material from a second one of the plurality of tanks to the first one of the plurality of tanks.

12. (Previously presented) A method according to claim 11 further comprising:
allowing at least a portion of the microbes and undigested organic material to dry within the second one of the plurality of tanks.

13. (Previously presented) A method according to claim 12 further comprising:
refilling the second one of the plurality of tanks with waste material from the waste material source.

14. (Previously presented) A method according to claim 12 further comprising:
transferring waste material from a third one of the plurality of tanks to the second one of the plurality of tanks.

15. (Previously presented) A method according to claim 14 further comprising:
allowing at least a portion of the microbes and undigested organic material to dry within the third one of the plurality of tanks.

16. (Previously presented) A method according to claim 15 further comprising:
refilling the third one of the plurality of tanks with waste material from the waste material source.

17. (Previously presented) A method according to claim 15 further comprising:
transferring waste material from a fourth one of the plurality of tanks to the third one of the plurality of tanks.

18. (Previously presented) A method according to claim 17 further comprising:
allowing at least a portion of the microbes and undigested organic material to dry within the fourth one of the plurality of tanks.

19. (Previously presented) A method according to claim 18 further comprising:
refilling the fourth one of the plurality of tanks with waste material from the waste material source.

20. (Previously presented) A method according to claim 18 further comprising:
transferring waste material from a fourth one of the plurality of tanks to the third one of the plurality of tanks.

21. (New) A process for digesting materials comprising:
providing a reaction container having a medium disposed therein;
receiving a stream of materials to be treated into the reaction container, the stream of materials including organic waste material and microbes capable of digesting at least a portion of the organic material;

holding the materials in the reaction container for a time interval sufficient to allow the microbes to digest at least a portion of the organic material in a bacterial growth phase;

draining liquid from the reaction container to allow at least a portion of the microbes and undigested organic material to dry within the reaction container; and

receiving an additional stream of materials to be treated into the reaction chamber with said at least a portion of the microbes and undigested organic material, the additional stream of materials including additional organic waste material and microbes,

wherein the digestion of organic material by the microbes produces methane and the process further comprises selectively removing methane from the reaction container.